

Welding Industry in Brazil

February 2006

Overview of the Welding Industry in Brazil

Summary

This report is an overview of the welding industry in Brazil. It provides information on the competitiveness of the industry and presence of U.S. firms. It should be of interest to U.S. welding companies already in Brazil or those wishing to enter the market.

Market Highlights & Best Prospects

According to the Brazilian Welding Association (ABS), there are no market statistics on the welding sector in Brazil. However, an industry source interviewed for this report, estimated the Brazilian market for welding equipment, consumables, gases and filler metals at US\$400 million, of which about 10% (US\$ 40 million) is imported equipment and filler metals. Exports of welding equipment and consumables are negligible.

Best Prospects

To avoid competing with local manufacturers and/or established local representatives for imported welding equipment in Brazil, import representatives tend to search for niche products for which there are only a few suppliers.

Competitive Analysis

Key Competitive Factors / Marketing Techniques

Brazil's market for welding equipment and consumables is very price sensitive, so locally manufactured low-tech equipment Commercial representatives for international sells well. competitors gain market share by demonstrating that their equipment presents superior and distinguishable characteristics. Key characteristics may include lower energy consumption, compliance with international manufacturing standards such NEMA and CE, higher welding quality, safety features and others. Such differentials are required by sophisticated end-users in the market.

While deciding upon a local partner/representative, U.S. businesses should closely examine that company's ability to provide after-sales service; reliably deliver spare parts; their ability to extend good financing terms to buyers; and a strong understanding of Brazil's customs process. The Brazilian Bank for Economic and Social Development (BNDES) offers attractive financing terms to purchasers of locally manufactured machines, so commercial representatives of international companies must offer extended payment terms to Brazilian clients; local representatives should know how to facilitate the import process with the Brazilian Customs so to lower some costs, and be able to provide spare parts and servicing when required.

Local Production

Some welding equipment manufactured in Brazil still follow specifications of the Brazilian Association of Technical Norms (ABNT) of 1986, which were based on NEMA standards and

are currently considered obsolete. There are no laboratories accredited to test welding machinery in Brazil, and most manufacturers have limited laboratory capabilities to test a machine's reliability.

The Brazilian market for welding equipment and consumables is mostly supplied by local producers; several or which are world leaders with locally established manufacturing plants. In addition to local production, these companies also supply the market with imported equipment from their plants abroad and usually import parts and accessories for Brazilian manufactured equipment.

According to the ABS, only recently has the local industry begun using more sophisticated welding equipment for some applications. The covered electrode welding process is being gradually replaced by the MIG/MAG because of its higher productivity. ABS foresees that electrode welding will be restricted to small business and maintenance operations. The submerged arc welding process and tubular wire process are also increasingly being used in this market, whereas the TIG process is limited to the food and stainless steel component industries.

The leading companies in the Brazilian welding industry are:

Esab S.A. Industria e Comercio http://www.esab.com.br

Market sources estimate that Esab holds about 55% of the Brazilian welding market. Esab opened its first plant in Brazil in 1955 and was bought in 1996 by the English firm, Charter PLC. The company currently produces a complete line of welding and cutting equipment and systems, common and special electrodes, tubular wires and fluxes for submerged arc welding. In addition to the local production, Esab supplies the market with equipment purchased from its plants abroad. It imports solid and flux cored wire from their sister company Conarco in Argentina (also a Charter company) and from Korea.

Bambozzi http://www.bambozzi.com.br

A Brazilian owned firm that manufactures electric arc welding machines (SMAW, GMAW, GTAW and SAW), fixtures and welding automation, electric hoists, alternators and magnetic wires.

Euctetic do Brasil Ltda. http://www.euctetic.com

Produces a wide range of alloys, processes, wear plates, functional finished parts and automated systems in the areas of welding, brazing, hard facing and coating technologies. Eutectic was acquired by Esab Brasil (see above), which also manufactures machines with the Eutectic brand.

ABB Ltda. http://www.abb.com/br

A Swiss company that offers industrial robots for a variety of applications, including arc welding, assembly, foundry, cutting, etc. *Fanuc, Motoman and Kuka, are also robotic companies with plants in Brazil.*

Lincoln Electric do Brasil http://www.lincolnelectric.com.br

Lincoln started its Brazilian operation in 1988, and in 2000 the company initiated local production of stick electrode and flux. The offices in Sao Paulo and Rio de Janeiro function as distribution centers and training facilities. Lincoln provides a complete line of welding and cutting equipment, covered electrode for carbon steel, hard facing and special alloys, mig wires, tubular wires and complete flux line for submerged arc. In 2006 Lincoln will start manufacturing welding machine and flux-cored wires in Brazil.

Miller ITW do Brasil Indl e Coml Ltda http://www.millerwelds.com

In 2000/2001, Miller appointed an experienced engineer as its country manager, who began to select distributors, identify opportunities and provide training. ITW Welding Brazil sells products from ITW's sister companies in the U.S.A., like Hobart Brothers, Bernard, etc. through a network of local distributors.

Welding Consumables

Gas

The gas manufacturers in Brazil are White Martins (recently acquired by Praxair), AGA, Air Liquide and Air Products. Sources from the Brazilian Welding Association estimate that these companies have annual revenues of US\$1.2 billion per year, of which about 10% are gases sold to the welding market. White Martins also sells welding machines from Italy and Finland, as well as flux-cored wires from Korea.

Filler Metals

The market for solid wire (low carbon) is supplied by the Brazilian steel companies Belgo Mineira and Gerdau. Esab also sells solid wires manufactured by Conarco Argentina (owned by Esab). Chinese, Korean and Italian wires are also sold through local commercial representatives.

The market for tubular wires is supplied by Esab and by imports from Korea, Italy, China and USA.

Sandwick and Nova Metal import solid wire for redrawing in Brazil, focusing on stainless steel, aluminum wires and rods.

The Brazilian company Oxigen manufactures solid aluminum wires. The market is also supplied by imports.

Imports and U.S. Market Position

Imports of welding equipment and consumables are estimated at about US\$40 million, or 10% of the total market.

The United States is the leading exporter of welding machinery and consumables to Brazil. According to an industry source, Lincoln Electric and Miller supply about 70% of the imported welding machines and filler metals.

Imported equipment consists mostly of three phase industrial equipment and inverters, used in heavy fabrication as well as in the automotive industry and maintenance services.

Some of the leading U.S. welding companies exporting to Brazil are Miller Electric (a welding equipment manufacturer) and Hobart (tubular wires and electrodes), which are represented by the Miller ITW Welding Group. Hypertherm of Hanover, NH (www.hypertherm.com) exports plasma-cutting systems, Fanuc Robotics (www.fanucrobotics.com) exports industrial robots and Lincoln Electric exports welding machines and filler metals.

Other leading international firms exporting to Brazil are: Fronius (Austria), Kemppi (Finland), CEA and CEBORA (Italy), Merkle Balmer (Germany) which have commercial representatives in Brazil. China also exports some welding equipment to Brazil.

End-User Analysis

Major end users are the automotive, oil and gas industries, household appliances, truck body producers, trains, shipyards and heavy industry.

Automobile and Tractor Industries

Brazil is the world's ninth largest automobile producer. Production figures in 2004 were as follows:

				In units
Passenger Vehicles				2,000,000
Trucks				107,000
Buses				29,000
Tractors machinery	(agricultural	and	construction	67,000

Source: ANFAVEA (National Association of Automobile Producers) http://www.anfavea.org.br

Automobile manufacturers with plants in Brazil include Fiat, Ford, GM, Honda, Mitsubishi, Nissan, Peaugeot Citroen, Renault, Toyota and Volkswagen.

Truck manufacturers include Agrale, Fiat, Ford, International, Daimler Chrysler, Iveco, Scania, Volvo, Peugeot Citroen.

Bus chassis manufacturers include Agrale, Iveco, Daimler Chrysler, Scania, Volvo and Volkswagen.

Truck Body Manufacturers:

In 2004, the domestic production of truck bodies and trailers was 118,182 units. The National Association of Truck Body Builders (Associação Nacional de Implementos Rodoviários – ANFIR – http://www.anfir.org.br) has 71 members, made up of predominantly well-capitalized Brazilian owned firms.

Bus Body Manufacturers:

According to the National Association of Bus body Producers – FABUS – the domestic production of buses in Brazil was 18,632 units in 2004 (http://www.fabus.com.br), and the country is a leading bus exporter.

Shipbuilding and Oil Platform Industries

The Brazilian shipbuilding and oil platform industries are expanding significantly, with investments of US\$5 billion during the last five years. The oil & gas and shipyard segments, which are concentrated in Rio de Janeiro state, currently employ 22,000

people. Petrobrás, the government-owned oil-and-gas company, has plans for 5-years of investment worth US\$40 billion in new gas and oil pipelines, oil platforms, refineries as well as in the expansion of the existing systems.

Household Appliances

ABINEE, the Brazilian Association of Electric/Electronic Industries, projects that sales of household appliances will reach R\$16.1 billion (about US\$ 7 billion) in 2005, a 5% increase over 2004. The household appliance industry in Brazil consists mostly of world leaders (Eletrolux, Bosch Siemens, Whirpool, GE, etc.) that acquired Brazilian owned firms in the nineties. Statistics on the sector are available at ABINEE's homepage (http://www.abinee.org.br).

Import Restrictions

There are no restrictions on importing welding equipment and welding consumables to Brazil. The import tariff on most of these products is 14%, however other taxes and costs related to importing into Brazil can increase the final price of imported machinery by roughly 60% (and by 80% for consumables/filler metals).

U.S. exporters should be aware that clearing products through Brazilian customs can represent a challenge and add extra cost (both in time and money) as they try to sell machinery in Brazil.

The recent valuation of the Brazilian currency (Real) vis-à-vis the U.S. Dollar does favor imports, though exchange rate volatility does create a challenge for importers (during 2005, the U.S. dollar's value fell by roughly 25% when compared to the Brazilian Real).

Welding equipment is classified under the 8515.3900 harmonized system code.

Import Financing

According to local commercial representatives for international machine manufacturers, good financing terms are essential for the welding business. There are several financing alternatives for Brazilian end users of imported machines of which lease financing through commercial banks is the most common. In this transaction, the commercial representative imports the equipment and sells it to the bank, which in turn, leases it to the end-user. There are also cases in which the commercial representative imports directly and extends six-month to one year payment term to the end user. In such cases, the international manufacturer offers long-term payment terms to the local commercial representative.

The U.S. Export-Import Bank, which is very active in Brazil, offers financing to importers of U.S. made equipment and services. Information on ExImBank programs are available at www.exim.gov

Distribution and Business Practices

Although some companies import machinery directly from the overseas manufacturer without local representation, in most cases the presence of a local representative is indispensable

for technical assistance, spare part provision and training. Larger representatives have offices in several cities for a more national reach, while smaller representatives supply only a specific region or appoint "business opportunity finders" in major Brazilian regions. The international manufacturer, local agent and distributor are free to negotiate the kind of partnership they will form — may it be exclusive or not.

U.S. companies should use the services of local law firms when signing agency or distribution contracts with a Brazilian partner. Commercial distribution contracts are not regulated by specific legislation, only by general Brazilian commercial law.

There is, though, specific legislation covering the relationship between a foreign company and a Brazilian agent. Although the contract clauses are freely negotiable, the payment to the agent in case a U.S. partner decides to break a contract with them is regulated and usually favors the agent.

Trade Shows

International Machinery and Industrial Supplies Trade Fair – Mecanica Trade Fair

Sao Paulo, SP, Brazil Bi-annual trade fair May 23 to 27, 2006

http://www.mecanica.com.br

The Commercial Service Sao Paulo will host a trade mission of welding equipment manufacturers, (members of the Welding Equipment Manufacturers Committee of the American Welding Society), during the show dates.

International Machine Tool and Integrated Manufacturing Systems Trade Fair – FEIMAFE

Sao Paulo, SP, Brazil Bi-annual trade fair May 2007 http://www.feimafe.com.br

Metal Cutting and Forming Trade Fair and Seminar

Sao Paulo, SP, Brazil Annual event October 2007 http://www.arandanet.com.br

Aranda Editors, publisher of the magazine "Corte e Conformação" (Cutting and Forming), organizes an annual trade show in Sao Paulo that attracts welding equipment manufacturers.

There are also some regional fairs that are not exclusive to the welding industry.

For further information, please contact Welding Industry Specialist Teresa Wagner at Teresa.Wagner@mail.doc.gov, or visit the U.S. Commercial Service Brazil's website, www.buyusa.gov/brazil.